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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/532,976

04/28/2005

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Q87718

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65565 7590 07/16/2008
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EXAMINER

FRAZIER, BARBARA S

ART UNIT

PAPER NUMBER

1611

MAIL DATE

DELIVERY MODE

07/16/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/532,976	Applicant(s) HIRAMOTO ET AL.	
	Examiner BARBARA FRAZIER	Art Unit 1611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 10-24 is/are pending in the application.
- 4a) Of the above claim(s) 7 and 10-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/21/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 1-7 and 10-24 are pending in this application.
2. Cancellation of claims 8 and 9 is acknowledged.
3. Claims 7 and 10-24 are withdrawn from consideration (see Election/Restrictions, below).
4. Claims 1-6 are examined.

Election/Restrictions

5. Claims 7 and 10 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 11/15/07.
6. Newly submitted claims 11-24 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:
7. The inventions listed as Groups I (claims 1-7 and 10) and II (claims 11-24) do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group I is drawn to a colored compound obtainable by reacting at least one amino acid selected from the list recited in claim 1, but Group II is drawn to a compound obtained by reacting any amino acid. Therefore, the two groups lack the same or corresponding special technical feature.
8. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 11-24 are withdrawn from consideration

as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

9. The rejection of claims 1, 6, 8, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosmarin et al (US Patent 2,875,769) is withdrawn in view of Applicant's amendment to claim 1.

Claim Rejections - 35 USC § 103

10. The rejection of claims 1-5 under 35 U.S.C. 103(a) as being unpatentable over Rosmarin et al (US Patent 2,875,769) is withdrawn in view of Applicant's amendment to claim 1.

11. The rejection of claims 1-3, 5, and 6 under 35 U.S.C. 103(a) as being unpatentable over Echigo et al (US Patent 6,190,891) is withdrawn in view of Applicant's amendment to claim 1.

12. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

13. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosmarin et al (US Patent 2,875,769) in view of Rozzell et al (US 2003/0041391).

The claimed invention is drawn to a deodorant composition comprising, as an active component, a colored compound obtainable by reacting a polyphenol and at least one amino acid selected from the list recited in claim 1, in a solvent showing alkalinity in

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the coexistence of oxygen molecules at a reaction pH value of 6.5 or more (see claim 1).

Rosmarin et al teach a keratinaceous fiber dye derived from reaction, under alkaline conditions, between hydroquinone and an alpha-amino acid which is either dihydroxyphenylalanine ("dopa") or dihydroxyphenylglycine ("dopa-G") (col. 1, lines 15-20). The product formed is a reactant-dye (col.1, line15), and therefore would inherently be colored. The reaction takes place in an aqueous non-acid alkaline medium (col. 2, line 20) at a pH value of 8 to about 11, most effectively from about pH 9 to about pH 10 (col. 2, lines 27-29). The reaction takes place advantageously always with stirring (col. 5, lines 10-11) and in the presence of an oxidizing agent (col. 5, lines 17-19), and therefore is in the coexistence of oxygen molecules. The compositions are used to dye keratinaceous substances such as hair (col. 1, lines 20-26).

Rosmarin et al differ from the claimed invention because they teach that the alpha-amino acid reacted with the hydroquinone is dihydroxyphenylalanine ("dopa") or dihydroxyphenylglycine ("dopa-G"), instead of one of the amino acids listed in claim 1.

Rozzell et al teach an agent for dyeing keratin fiber containing at least one compound with a nucleophilic reaction center and at least one alcohol with an oxidizing agent (abstract). Compounds with a nucleophilic reaction center may be amino acids (paragraph 11); examples listed are arginine, histidine, tyrosine, phenylalanine, dihydroxyphenylalanine, lysine, and tryptophan (paragraph 15).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to substitute arginine, histidine, tyrosine, phenylalanine, lysine,

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or tryptophan for dihydroxyphenylalanine in the composition of the combined references; thus arriving at the claimed invention. One skilled in the art would have been motivated to do so because arginine, histidine, tyrosine, phenylalanine, lysine, tryptophan and dihydroxyphenylalanine are all amino acids reactive with alcohols in hair dyeing compositions as taught by Rozzell et al, and therefore are functionally equivalent to one another. Therefore, it would be well within the purview of the skilled artisan to substitute any of the amino acids taught by Rozzell et al for the amino acid dihydroxyphenylalanine taught by Rosmarin et al, since the prior art establishes the functional equivalency of arginine, histidine, tyrosine, phenylalanine, lysine, tryptophan and dihydroxyphenylalanine.

With respect to the preamble of claim 1, identifying the composition as a "deodorant composition", it is noted that the preamble merely states the intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, and therefore is not considered a limitation giving any weight to the claim. MPEP 2111.02.

Regarding claim 2, Rosmarin et al teach that the reaction takes place advantageously with stirring (col. 5, lines 10-11) and in the presence of an oxidizing agent (col. 5, lines 17-19). One skilled in the art would recognize that, under such conditions, the concentration of oxygen would fall within the range of 1 mg/L or more as taught in claim 2.

Regarding claim 3, Rosmarin et al do not specifically teach that the reaction temperature is in the range of 0 to 60 degrees C. However, since no temperature is

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specified, one skilled in the art would recognize that the reaction takes place at ambient temperature, or 25 degrees C, which is encompassed by Applicant's temperature range.

Regarding claim 4, Rosmarin et al teach that the reaction may take place in the presence of an alkali metal hydroxide (col. 5, lines 41-48), thus supplying an alkali metal ion to the reaction system.

Regarding claim 5, Rosmarin et al teach that another polyhydric phenol may be present, such as catechol, an o-diphenol (col. 3, lines 23-29).

Regarding claim 6, Rosmarin et al teach that the polyphenol reacted is hydroquinone (col. 1, lines 15-20).

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA FRAZIER whose telephone number is (571)270-3496. The examiner can normally be reached on Monday-Thursday 9am-4pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571)272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BSF

/MP WOODWARD/
Supervisory Patent Examiner, Art Unit 1615